CLAIM AMENDMENTS

Claims 1-24 are pending in the application.

Please cancel claims 1-24 as shown below without prejudice or disclaimer to the subject matter of claims 1-24.

Please add claims 25-44 as shown below.

The following listing of claims 1-44 will replace all prior versions, and listings, of claims in the application:

Sub C1

1.-23. (Cancelled)

25. (New) A LED backlight for an LCD display, comprising:

a primary circuit for generating a primary voltage;

a first secondary circuit coupled to said primary circuit for receiving a first secondary voltage as a function of the primary voltage, said first secondary circuit including

a first sub-array of LEDs of a first color,

a first sub-array switch operable in a first ON state for allowing a flow of a first LED current through said first sub-array of LEDs, the first LED current being a function of said first secondary voltage, and

a first sub-array controller for controlling an operation of said first switch in the first ON state; and

a second secondary circuit coupled to said primary circuit for receiving a second secondary voltage as a function of the primary voltage, said second secondary circuit including

a second sub-array of LEDs of a second color,

a second sub-array switch operable in a second ON state for allowing a flow of a second LED current through said second sub-array of LEDs, the second LED current being a function of said second secondary voltage, and

a second sub-array controller for controlling an operation of said second switch in the second ON state,

wherein said first sub-array controller controls the operation of said first sub-array switch in the first ON state and said second sub-array controller controls the operation of said second sub-array switch in the second ON state in a mutually exclusive manner.

26. (New) The LED backlight of claim 25,

wherein said first sub-array controller controls the operation of said first switch in the first ON state as a function of a first feedback voltage indicative of a first LED voltage across said first sub-array of LEDs.

27. (New) The LED backlight of claim 26,

wherein said second sub-array controller controls the operation of said second switch in the second ON state as a function of a second feedback voltage indicative of a second LED voltage across said second sub-array of LEDs.

28. (New) The LED backlight of claim 25,

wherein said first sub-array controller controls the operation of said first switch in the first ON state as a function of a first reference current indicative of a first commanded light output of said first sub-array of LEDs.

29. (New) The LED backlight of claim 28,

wherein said second sub-array controller controls the operation of said second switch in the second ON state as a function of a second reference current indicative of a second commanded light output of said second sub-array of LEDs.

30. (New) The LED backlight of claim 25,

wherein said first sub-array controller modulates the first LED current when said first sub-array switch is operating in the first ON state.

31. (New) The LED backlight of claim 30,

wherein said second sub-array controller modulates the second LED current when said second sub-array switch is operating in the second ON state.

32. (New) The LED backlight of claim 25,

wherein said first sub-array controller controls at least one of a first pulse-amplitude modulation, a first pulse-width modulation, and a first pulse-frequency modulation of the first LED current when said first sub-array switch is operating in the first ON state.

33. (New) The LED backlight of claim 32,

wherein said second sub-array controller controls at least one of a second pulse-amplitude modulation, a second pulse-width modulation, and a second pulse-frequency modulation of the second LED current when said second sub-array switch is operating in the second ON state

34. (New) The LED backlight of claim 25,

wherein said first secondary voltage is applied between a first node and a second node;

wherein said first sub-array switch includes a first current path connected to said first node and a third node when said first sub-array switch is operating in the first ON state;

wherein said first sub-array of LEDs is connected to said third node;

wherein said first sub-array switch further includes a first control input for controlling the operation of said first sub-array switch in the first ON state; and

wherein said first sub-array controller is connected to said first control input to thereby control the operation of said first sub-array switch in the first ON state.

35. (New) The LED backlight of claim 34,

wherein said second secondary voltage is applied between a fourth node and a fifth node;

wherein said second sub-array switch includes a second current path connected to said fourth node and a sixth node when said second sub-array switch is operating in the second ON state,

wherein said second sub-array of LEDs is connected to said sixth node;

wherein said second sub-array switch further includes a second control input for controlling the operation of said second sub-array switch in the second ON state; and

wherein said second sub-array controller is connected to said second control input to thereby control the operation of said second sub-array switch in the second ON state.

36. (New) The LED backlight of claim 26,

wherein said first secondary voltage is applied between a first node and a second node;

wherein said first sub-array switch includes a first current path connected to said first node and a third node when said first sub-array switch is operating in the first ON state;

wherein said first sub-array of LEDs is connected to said third node and a fourth node;

wherein said first sub-array switch further includes a first control input for controlling the operation of said first sub-array switch in the first ON state;

wherein said first sub-array controller is connected to said first control input to thereby control the operation of said first sub-array switch in the first ON state;

wherein said first sub-array controller is further connected to said fourth node to determine the first feedback voltage.

37. (New) The LED backlight of claim 36,

wherein said first secondary circuit further includes a resistor connected to said second node and said fourth node to facilitate a determination of the first feedback voltage by said first sub-array controller.

38. (New) The LED backlight of claim 27,

wherein said first secondary voltage is applied between a first node and a second node;

wherein said first sub-array switch includes a first current path connected to said first node and a third node when said first sub-array switch is operating in the first ON state;

wherein said first sub-array of LEDs is connected to said third node and a fourth node;

wherein said first sub-array switch further includes a first control input for controlling the operation of said first sub-array switch in the first ON state,

wherein said first sub-array controller is connected to said first control input to thereby control the operation of said first sub-array switch in the first ON state; and

wherein said first sub-array controller is further connected to said third node and said fourth node to determine the first feedback voltage.

39. (New) The LED backlight of claim 38,

wherein said first secondary circuit further includes a resistor connected to said second node and said fourth node to facilitate a determination of the first feedback voltage by said first sub-array controller.

40. (New) The LED backlight of claim 38,

wherein said second secondary voltage is applied between a fifth node and a sixth node;

wherein said second sub-array switch includes a second current path connected to said first node and a seventh node when said second sub-array switch is operating in the second ON state;

wherein said second sub-array of LEDs is connected to said seventh node and an eighth node;

wherein said second sub-array switch further includes a second control input for controlling the operation of said second sub-array switch in the second ON state;

wherein said second sub-array controller is connected to said second control input to thereby control the operation of said second sub-array switch in the second ON state; and

wherein said second sub-array controller is further connected to said seventh node and said eighth node to determine the second feedback voltage.

41. (New) The LED backlight of claim 40,

wherein said first secondary circuit further includes a first resistor connected to said second node and said fourth node to facilitate a determination of the first feedback voltage by said first sub-array controller; and

wherein said second secondary circuit further includes a second resistor connected to said sixth node and said eighth node to facilitate a determination of the second feedback voltage by said second sub-array controller.

42. (New) The LED backlight of claim 25, further comprising:

a transformer including a first magnetic coupling of a primary winding and a first secondary winding,

wherein said primary circuit is connected to said primary winding to thereby apply the primary voltage across said primary winding whereby the first secondary voltage is applied across said first secondary winding, and

wherein said first secondary circuit is connected to said first secondary winding.

43. (New) The LED backlight of claim 25,

wherein said transformer further includes

a first magnetic coupling of a primary winding and a first secondary winding, and

a second magnetic coupling of said primary winding and a second secondary winding;

wherein said primary circuit is connected to said primary winding to thereby apply the primary voltage across said primary winding whereby the first secondary voltage is applied across said first secondary winding and the second secondary voltage is applied across said second secondary winding; and

wherein said first secondary circuit is connected to said first secondary winding, and the second secondary circuit is connected to said second secondary winding.

44. (New) The LED backlight of claim 25, further comprising:

a third secondary circuit coupled to said primary circuit for receiving a third secondary voltage as a function of the primary voltage, said third secondary circuit including

a third sub-array of LEDs of a third color,

a third sub-array switch operable in a third ON state for allowing a flow of a third LED current through said third sub-array of LEDs, the third LED current being a function of said third secondary voltage, and

a third sub-array controller for controlling an operation of said third switch in the third ON state,

wherein said first sub-array controller controls the operation of said first sub-array switch in the first ON state, said second sub-array controller controls the operation of said second sub-array switch in the second ON state, and said third sub-array controller controls the operation of said third sub-array switch in the third ON state in a mutually exclusive manner.